

REMARKS

The Official Action of December 14, 2004, and the prior art cited and relied upon therein have been carefully studied. The claims in the application remain as claims 1-36, and these claims define patentable subject matter warranting their allowance. Claims 1, 2, 9, 10, 13, 21, 22, 25, 33 and 34 are hereby amended. No new matter has been added. Favorable reconsideration and such allowance are respectfully urged.

Applicants thank Examiner Dastouri for the courtesy of a personal interview with Applicants' representative, Daniel Kligler (Reg. No. 41,120) at the USPTO on March 17, 2005. At the interview, Applicants' representative explained the distinction of the claimed invention over the cited art (Kupeev et al., "A New Method of Estimating Shape Similarity"). The Examiner replied that in his view, notwithstanding Applicants' arguments, the language of the claims as filed still read on Kupeev. The Examiner suggested amending the independent claims to reflect the specific methods taught by the present patent application for mapping graphs to strings, such as to more directly cover the embodiment described on page 13 of the application.

In a subsequent telephone interview on April 11, Applicant's representative proposed an alternative amendment to claim 1, but the Examiner did not agree that the amendment would put the claim in condition for allowance. Therefore, in the present amendment, Applicants have amended the independent claims in the manner suggested by the Examiner at the interview of March 17.

Claims 1-8, 10-20, 22-32 and 34-36 were rejected under 35 U.S.C. 102(b) over Kupeev. This rejection is respectfully traversed.

Applicants have amended independent claims 1, 13 and 25 in order to clarify the distinction of the present invention over the cited art. Dependent claims 2, 10, 22 and 34 have been amended to accord with the amended language of the independent claims.

Amended claim 1 recites a method for analyzing an image, which includes constructing a graph to represent an object appearing in the image and mapping the graph a string of symbols. The string is then processed so as to classify the object. The amended claim clarifies that the graph is mapped by traversing the edges of the graph and adding characters to the string from a four-letter alphabet. Each character in the four-letter alphabet is indicative of a

predefined feature of the spatial relation between the vertices of the graph. The amended claim language is supported on page 13, lines 3-18, in the specification. This passage is followed by a description of an exemplary alphabet and correspondence that may be used for this purpose.

Kupeev describes a method for estimating shape similarity using "G-graphs," which represent a geometrical structure of a contour and the locations and sizes of "lumps" formed by the contour relative to the axes of a Cartesian frame. In the examples given by Kupeev, letters of the alphabet are used to label the vertices of the graphs. The labeling, however, is arbitrary, and letters of the English alphabet are simply used in sequence, irrespective of the spatial relation between the vertices of the graph.

Kupeev does not teach or suggest the use of a four-letter alphabet, or that each character in the alphabet is indicative of a predefined feature of the spatial relation between vertices of the graph. Rather, different letters in Kupeev's arbitrary alphabet may be used to label vertices having the same spatial relation, and the same letter may be used at different times to label vertices having different spatial relations. This aspect of Kupeev's alphabetic labeling is illustrated by his Figures 3 and 4.

Thus, claim 1 as amended is believed to be patentable over Kupeev. In view of the patentability of claim 1, dependent claims 2-8 and 10-12, all of which depend from claim 1, also are patentable.

Independent claims 13 and 25 respectively recite apparatus and a computer software product, which operate on similar principles to the method of claim 1. Claims 13 and 25 have been amended in like manner to claim 1, and are therefore believed to be patentable for the reasons explained above. In view of the patentability of independent claims 13 and 25, dependent claims 14-20, 22-24, 26-32 and 34-36 are likewise believed to be patentable.

Applicants respectfully request withdrawal of the rejection.

Claims 9, 21 and 33 were objected to for depending from a rejected base claim, but were deemed to recite allowable subject matter, i.e. the PTO agrees that these claims define novel and unobvious subject matter under §§ 102 and 103. Applicants have therefore amended these claims to stand as independent claims, incorporating the features of the base claims and intervening claims from which they formerly depended. Therefore, claims 9, 21 and 33 are now believed to be in condition for allowance.

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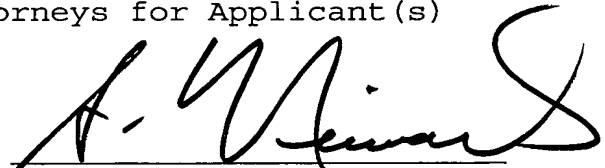
The prior art documents made of record and not relied upon have been noted along with the implication that such documents are deemed by the PTO to be insufficiently pertinent to warrant their applications against any of applicant's claims. Applicants agree.

Applicants believe the amendments and remarks presented hereinabove to be fully responsive to all of the objections and grounds of rejection raised by the Examiner. In view of these amendments and remarks, Applicants respectfully submit that all of the claims in the present application are in order for allowance. Notice to this effect is hereby requested.

Respectfully submitted,

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